Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) A method for printing, comprising:

providing a printing system for printing a code on a product moving in a direction, the code being constructed from a plurality of pixels in a first data set indicating positions of the pixels;

generating a corrected data set indicating positions that the pixels would occupy if each pixel was moved at a velocity of the product until the pixel was printed; and

printing the code according to the corrected data set by continuously directing a printing beam to a plurality of locations on a material of the product as defined by the corrected data set, without de-activating the printing beam, to alter an optical characteristic of the material at the locations, a dwell time at each location being longer than a dwell time on areas of the material traveled by the printing beam between consecutive locations, wherein the locations on the material having the altered optical characteristic form the code on the product.

2. (Previously Presented) The method of claim 1, wherein printing the code according to the corrected data set includes printing a two dimensional trace of pixels.

3. (Previously Presented) The method of claim 1, wherein printing the code according to the corrected data set includes printing a two dimensional trace of spots.

4. (Previously Presented) The method of claim 1, further comprising:

prioritizing an order in which the pixels are printed such that the pixels are printed in a direction which is opposite to the direction which the product moves.

5. (Previously Presented) The method of claim 1, wherein the printing system includes

a laser mounted in a housing, the housing including an optics assembly configured to focus the printing beam produced by the laser onto the product when the product is positioned adjacent the housing.

6. (Previously Presented) The method of claim 1, wherein the printing system includes

a laser configured to produce the printing beam for printing the code on the product;

a housing including a printing beam exit member through which the printing beam exits the housing; and

an optics assembly within the housing, the optics assembly configured to focus the printing beam on the product when the product is adjacent to the housing.

7. (Original) The method of claim 1, wherein the pixels are constructed from a plurality of spots.

8. (Original) The method of claim 1, wherein the pixels are constructed from a plurality of spots and the first data set indicates the positions of the spots in the code.

9. (Previously Presented) The method of claim 1, wherein the pixels are constructed from a plurality of spots and the corrected data set indicates the positions that each spot would occupy if each spot was moved along with the product until the spot was printed.

10. (Previously Presented) A printing system, comprising:

a laser that produces a printing beam for printing a code on a product moving in a direction, the code being constructed from a plurality of pixels in a first data set indicating positions of the pixels;

electronics that generate a corrected data set indicating positions that the pixels would occupy if each pixel was moved at a velocity of the product until the pixel was printed; and

electronics that print the code according to the corrected data set by causing the printing beam to be continuously directed to a plurality of locations on a material of the product as defined by the corrected data set, without de-activating the printing beam, to alter an optical characteristic of the material at the locations, a dwell time at each location being longer than a dwell time on areas of the material traveled by the printing beam between consecutive locations, wherein the locations on the material having the altered optical characteristic form the code on the product.

11. (Previously Presented) The printing system of claim 10, wherein printing the code according to the corrected data set includes printing a trace of pixels in two dimensions.

12. (Previously Presented) The printing system of claim 10, wherein printing the code according to the corrected data set includes printing a trace of spots in two dimensions.

13. (Previously Presented) The printing system of claim 10, further comprising:

electronics that prioritize an order in which the pixels are printed such that the pixels are printed in a direction which is opposite to the direction which the product moves.

14. (Previously Presented) The printing system of claim 13, wherein the laser is mounted in a housing, the housing including an optics assembly configured to focus the printing beam produced by the laser onto the product when the product is positioned adjacent the housing.

15. (Previously Presented) The printing system of claim 13, further comprising:

a housing including a printing beam exit member through which the printing beam exits the housing; and

an optics assembly within the housing, the optics assembly configured to focus the printing beam on a product which is adjacent to the housing.

16. (Original) The printing system of claim 13, wherein the pixels are constructed from a plurality of spots.

17. (Original) The printing system of claim 13, wherein the pixels are constructed from a plurality of spots and the first data set indicates the positions of the spots in the code.

18. (Original) The printing system of claim 13, wherein the pixels are constructed from a plurality of spots and the corrected data set indicates the positions that each spot would occupy if each spot was moved along with the product until the spot was printed.

19. (Previously Presented) A method for printing on a product, comprising:

providing a printing system for printing a code on the product which is adjacent to the printing system and which is moving in a direction relative to the printing system, the code constructed from a plurality of pixels; and

prioritizing an order in which the pixels are printed such that the pixels are printed in a direction which is opposite to the direction which the product moves.

20. (Previously Presented) The method of claim 19, wherein an aperture limits an area within which the printing system is able to print and the product moves past the aperture.

21. (Original) The method of claim 20, wherein the pixels are prioritized such that pixels which would cross in front of the aperture earlier are given a higher priority than pixels which would cross in front of the aperture later if the pixels were already printed on the product as the product moves past the aperture.

22. (Original) The method of claim 19, wherein the pixels are each constructed from a plurality of spots and prioritizing the order in which the pixels are printed includes prioritizing

the order which the spots are printed such that the spots are printed in a direction which is opposite to the direction which the product moves.

23. (Previously Presented) The method of claim 19, wherein the pixels are arranged in a first data set indicating positions of the pixels, and further comprising:

generating a corrected data set indicating positions that the pixels would occupy if each pixel were moved along with the product until the pixel was printed.

24. (Original) The method of claim 19, wherein the pixels are arranged in a plurality of columns and prioritizing the order which the pixels are printed includes prioritizing each of the columns.

25. (Previously Presented) The method of claim 19, wherein the printing system includes

a laser mounted in a housing, the housing including an optics assembly configured to focus a printing beam produced by the laser onto the product when the product is positioned adjacent to the housing.

26. (Previously Presented) The method of claim 19, wherein the printing system includes

a laser configured to produce a printing beam for printing the code on the product;

a housing including a printing beam exit member through which the printing beam exits the housing; and

an optics assembly within the housing, the optics assembly configured to focus the printing beam on the product when the product is adjacent to the housing.

27. (Previously Presented) A printing system, comprising:

a laser that produces a printing beam for printing a code on a product which is adjacent to the printing system and moving in a direction relative to the printing system, the code being constructed from a plurality of pixels; and

electronics that prioritize an order in which the pixels are printed such that the pixels are printed in a direction which is opposite to the direction which the product moves.

28. (Previously Presented) The printing system of claim 27, wherein an aperture limits an area of the product on which the laser is able to print as the product moves past the printing system.

29. (Original) The printing system of claim 28, wherein the pixels are prioritized such that pixels which would cross in front of the aperture earlier are given a higher priority than pixels which would cross in front of the aperture later if the pixels were present on the product before being printed by the printing system.

30. (Original) The printing system of claim 27, wherein the pixels are each constructed from a plurality of spots and prioritizing the order in which the pixels are printed includes prioritizing the order which the spots are printed such that the spots are printed in a direction which is opposite to the direction which the product moves.

31. (Previously Presented) The printing system of claim 27, wherein the pixels are arranged in a first data set indicating positions of the pixels, and further comprising:

generating a corrected data set indicating positions that the pixels would occupy if each pixel were moved along with the product until the pixel was printed.

32. (Original) The printing system of claim 27, wherein the pixels are arranged in a plurality of columns and prioritizing the order which the pixels are printed includes prioritizing each of the columns.

33. (Previously Presented) A method for printing, comprising:

providing a printing system for printing an alphanumeric code on a product moving in a direction, the code being constructed from a plurality of pixels in a first data set indicating positions of the pixels;

generating a corrected data set indicating positions that the pixels would occupy if each pixel was moved at a velocity of the product until the pixel was printed; and

printing the pixels on the product in a two dimensional trace according to the corrected data set by continuously directing a printing beam to a plurality of locations on a material of the product as defined by the corrected data set, without de-activating the printing beam, to alter an optical characteristic of the material at the locations, a dwell time at each location being longer than a dwell time on areas of the material traveled by the printing beam between consecutive locations, wherein the printing beam remains incident on the material, and the locations on the material having the altered optical characteristic form the code on the product.

34. (Previously Presented) A method of printing, comprising:

providing a printing system for printing an alphanumeric code on a product moving in a direction, the code being constructed from a plurality of pixels; and

changing a density of the pixels that construct the code in response to a change in velocity of the product moving in the direction.

35. (Previously Presented) The method of claim 34, wherein the density of the pixels is decreased in accordance with a reduced amount of time available to print the code on the product.

36. (Previously Presented) A printing system, comprising:

a laser that produces a printing beam for printing an alphanumeric code on a product that is adjacent to the printing system and moving in a direction relative to the printing

system, the code being constructed from a plurality of pixels in a first data set indicating positions of the pixels;

electronics that generate a corrected data set indicating positions that the pixels would occupy if each pixel was moved at a velocity of the product until the pixel was printed; and

electronics that print the pixels on the product according to the corrected data set by causing the printing beam to be continuously directed to a plurality of locations on a material of the product as defined by the corrected data set, without de-activating the printing beam, to alter an optical characteristic of the material at the locations, a dwell time at each location being longer than a dwell time on areas of the material traveled by the printing beam between consecutive locations, wherein the printing beam remains incident on the material, and the locations on the material having the altered optical characteristic form the code on the product, the pixels being printed in a two dimensional trace.

37. (Previously Presented) The printing system of claim 36, further comprising electronics that prioritize an order in which the pixels are printed based on the direction of the product and an aperture associated with the printing system.

38. (Previously Presented) The method of claim 33, further comprising prioritizing an order in which the pixels are printed based on the direction of the product and an aperture associated with the printing system.

39. (Previously Presented) The method of claim 34, wherein changing the density of the pixels comprises changing a number of spots that form each of the pixels on the product.

40. (Previously Presented) The method of claim 34, further comprising prioritizing an order in which the pixels are printed based on the direction of the product and an aperture associated with the printing system.

41. (Previously Presented) A printing system comprising:

a laser that produces a printing beam for printing a code on a product moving in a direction relative to the printing system, the code being constructed from a plurality of pixels; and

electronics that change a density of the pixels that construct the code in response to a change in velocity of the product moving in the direction.

42. (Previously Presented) The printing system of claim 41, wherein the electronics decrease the density of the pixels in accordance with a reduced amount of time available to print the code on the product.

43. (Previously Presented) The printing system of claim 41, wherein the electronics change the density of the pixels by changing a number of spots that form each of the pixels on the product.

44. (Previously Presented) The printing system of claim 41, further comprising electronics that prioritize an order in which the pixels are printed based on the direction of the product and an aperture associated with the printing system.

45. (New) A printing system comprising:

a laser that produces a printing beam;

an optics assembly; and

electronics operable to control the laser and the optics assembly to continuously direct the printing beam to a plurality of locations on a material of a product, without de-activating the printing beam, to alter an optical characteristic of the material at the locations, a dwell time at each location being longer than a dwell time on areas of the material traveled by the printing beam between consecutive locations, wherein the printing beam remains incident on the material, and the plurality of locations on the material having the altered optical characteristic form at least a portion of at least one symbol forming a code on the product.

46. (New) The printing system of claim 45, wherein the electronics are operable to control the laser and the optics assembly to continuously direct the printing beam to the plurality of locations on the material, without de-activating the printing beam, such that the plurality of locations on the material having the altered optical characteristic form the at least one symbol forming the code on the product.

47. (New) The printing system of claim 46, wherein the electronics are operable to control the laser and the optics assembly to continuously direct the printing beam to the plurality of locations on the material, without de-activating the printing beam, such that the plurality of locations on the material having the altered optical characteristic form the code on the product.

48. (New) The printing system of claim 45, wherein the electronics are operable to control the laser and the optics assembly to continuously direct the printing beam to the plurality of locations on the material, without de-activating the printing beam, such that areas of the material having the altered optical characteristic comprise spots that partially overlap.

49. (New) The printing system of claim 48, wherein the electronics are operable to control the laser and the optics assembly to continuously direct the printing beam to the plurality of locations on the material, without de-activating the printing beam, such that the spots form pixels, and the pixels do not overlap.

50. (New) A method of printing comprising:

generating a laser beam;

directing the laser beam to a plurality of locations on a material of a product without de-activating the laser beam; and

adjusting a dwell time of the laser beam on the material during said directing such that an optical characteristic of the material is altered to form spots at the locations and the

optical characteristic of the material is not altered in areas of beam incidence between the spots, wherein the spots are arranged to form at least a portion of at least one symbol on the product.

51. (New) The method of claim 50, wherein the spots are arranged to form the at least one symbol on the product.

52. (New) The method of claim 51, wherein the spots are arranged to form a sequence of symbols on the product.

53. (New) The method of claim 50, wherein the spots partially overlap.

54. (New) The method of claim 53, wherein the spots form pixels, and the pixels do not overlap.